This thesis will explore new alchemies of architecture, urban planning and real estate development to remedy failing American malls and their urban contexts. The focus of this thesis is to build a toolbox of urban, architecture, and landscape strategies to diagnose and heal malls in economically distressed areas. As people move back into cities, malls are becoming vestiges of suburban sprawl and an ethos that has failed us. Once numbering roughly 1,500 nationwide, the number of regional malls is projected to dwindle to little over 300 in the coming decades\textsuperscript{1}. With the national decline of the specialized mall format, there is an opportunity to hypothesize about the future of these failing malls. I will investigate specialty and commodity retail to understand the history of the retail industry and its effect on our urban evolution. By studying the rise of shopping malls and the isolation of retail in America I will make a case for more appropriate place-making that encourages more balanced, sustainable and resilient urbanism. These strategies will be applied to Marley Station Mall, located in Anne Arundel County, Maryland.

\textsuperscript{1} Egelanian, Nick, SiteWorks Retail Real Estate Services, President
LEFT FOR DEAD
REURBANIZING AND ADAPTING FAILING AMERICAN MALLS

By
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Thesis submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Master of Architecture 2015

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Malls are an American Institution and part of our cultural heritage. Known by names such as the agora and the bazaar, the mall typology has been around since the earliest of civilizations. Paco Underhill, an environmental psychologist who focuses on retail, writes, “Since the earliest agrarian villages we have organized ourselves around the function of shopping.” Yet, the largest retail structures ever built are in a national decline. Once a convenient shopping option for commodity goods and an aspirational place to spend discretionary time and income, malls are verging on obsolescence. This can be seen in the extreme decline of regional enclosed malls from 1,500 nationwide to little more than 300 Class-A malls in the coming decades. Built on a 20 year depreciation cycle, many malls are at the end of their useful life. Malls are unable to adapt to changing consumer behaviors, challenges of internet retailing, and shifting demographics. Suburbanites are either moving back into cities

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or are moving to a “newer, shinier suburb on the edge.” Holding companies are consolidating these once independently owned shopping centers and asking the question, "So what now?" This is a critical point in time to hypothesize about the future of these failing shopping malls. As large, singularly owned parcels, these malls offer some of the best opportunities for suburban infill.

Many mall redevelopments are stalled by tenants whose original leases guaranteed reciprocal development rights. Mall redevelopments are creating inauthentic places designed to look like shopping streets from around the world. These mall redevelopments, however, are only cosmetic treatments of a malady that needs deeper diagnostic insight and more meaningful solutions. Design thinking can overcome these challenges to create productive, self-sustaining and adaptable places.

This thesis will first investigate the divergence of Commodity and Specialty Retail to understand why the mall format is failing. This thesis was done in conjunction with a Real Estate Capstone. As part of the dual degree program, I have analyzed the mall through four lenses: real estate development, urban design, adaptive reuse, and environmental sustainability, in order to propose the redevelopment of Marley Station Mall, a 1.4 million square foot, two story superregional mall located in Glen Burnie, Maryland. I will analyze various urban and adaptive reuse theories in order to develop a toolbox of urban and architectural

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strategies to preserve the history of the mall and create a more authentic place. This framework yields a holistic strategy for reinvestment in the mall and its suburban context.
01 – History of the American Mall

“Malls are a monument to the moment when America turned its back on the city.”

Paco Underhill

01.01 – Suburbanization

The rise of the mall is linked to the rapid suburbanization following World War II. By the late 1940’s, millions of American GI’s returned home from the War to an economic boom stimulated by wartime manufacturing. Simultaneously, the commercialization of the automobile and the suburban dream facilitated “white flight.” Millions of people moved from decaying city centers to new suburban subdivisions. The Federal Highway System, created by the 1941 National Highway Commission, ushered a new era of mobility. Homeownership became part of the American dream. Fueled by a demand and supply imbalance, suburbs were rapidly developed using the model developed by Abraham Levitt in Levittown, New York. “By 1950, the same assembly-line methods that had turned out an airplane every five minutes during World War II were being used to build almost four new houses per minute.” By 1970, more Americans lived in suburban than urban areas.

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01.02 – First Suburban Malls

A period of unprecedented shopping center development naturally followed suburbanization. New suburbs required commercial districts to support growing populations. Malls mimicked the downtown commercial districts, developing an open-air Main Street format that offered products ranging from auto supplies to apparel. Later, malls were enclosed to offer year-round shopping, creating the “city under a roof” archetype that would reign as the preferred retail model for the next 30 years.

Malls were developed along arterials within the inner ring of suburbs in order to be closer to suburban shoppers rather than downtown shopping districts. Full-lined department stores anchored internal streets lined with smaller retail tenants. Mall developers fought for coveted anchors, offering incentives such as free rent, reciprocal redevelopment rights and decades-long ground leases. Smaller tenants, generating the highest rents per square foot, negotiated co-tenancy rights based upon the anchors. These strategies leveraged fragile and highly specialized retail delivery systems that have now become vulnerable to evolving markets and urban complexities.

01.02.A – Southdale Mall

The first archetypical enclosed shopping mall was built in Edina, Minnesota in 1956 by Victor Gruen. Gruen developed Southdale Center as a communal place for shoppers, taking precedent from the retail arcades in his home in Vienna, Austria. In developing the mall, Gruen hoped to liberate Americans from “the terror of the automobile” and the social isolation of
suburban sprawl. Southdale Center was envisioned as a “Garden Court of Perpetual Spring.” The large climate controlled spaces featured attractions such as a goldfish pond, bird aviary, sculptures, and a sidewalk café. Originally envisioned as a solution to urban sprawl, malls have since evolved into the de-facto social gathering spaces for suburban communities lacking well-developed social and cultural centers.10

Figure 1: Southdale Shopping Mall Edina MN Garden Court by William Bird 11


Figure 2: Retail Chronology: A Century of Shopping
01.03 – The Death of the Mall

“Malls endure public deaths. Letters fall off the marquee and weeds grow in the parking lot.”

Jonathon O’Connell

From 1956 to 2005, over 1500 enclosed malls were built in America. In the 1970’s, during the Golden Age of the mall, “American adults spent more time in malls than anywhere else except for home and work.” It was at this time that malls marked the decline of the downtown shopping district. Today, malls account for 14% of all U.S. retailing (excluding cars and gasoline) and about $308 billion in annual sales.

For the purposes of this thesis, malls with vacancy rates of 40% or greater are considered dying while malls with vacancy rates of 20% or more (short of fully-leased) are considered unhealthy.

According to The Costar Group, almost one-fifth of the nation’s enclosed malls have vacancy rates higher than 10%, which is considered unhealthy in the real estate industry. Nearly 15% percent of malls are 10% to 40% vacant and 3.4% of malls have vacancy rates of 80% or greater.

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malls, representing more than 30 million square feet of retail, are more than 40% vacant.\textsuperscript{17} Simply filling these vacancies, however, will not overcome the more profound problems of the mall.

Ellen Dunham-Jones, Professor of Architecture at Georgia Institute of Technology and author of \textit{Retrofitting Suburbia}, boldly proclaims that one-third of malls are dead or dying. Howard Davidowitz, chairman of Davidowitz & Associates, Inc., a retail consulting firm, expects as many as half of America's shopping malls to fail within 15 to 20 years.\textsuperscript{17} Davidowitz predicts that only upscale shopping centers with anchors like Saks Fifth Avenue and Neiman Marcus will survive, stating that "Middle-level stores in middle-level malls are going to be extinct because they don't make sense."\textsuperscript{18} Don Wood, chief executive of Rockville-based Federal Realty Investment Trust, predicts that only 100 enclosed malls will remain dominant shopping destinations.\textsuperscript{19} It is clear that we have entered a new era in the space-based retail industry, an era in which the mall can no longer compete.


02- Retail Theory

“Since the 1900’s, significant changes in transportation and retail distribution systems have dramatically altered the organization and function of retail development. Each generational change in transportation systems and retailing formats has led to major revolutions in shopping center design. Likewise, how retailers display and distribute goods is critical to understanding the buildings and shopping center infrastructure they require.”

Nick Egelanian

This chapter will explore the divergence of Specialty and Commodity Retail in order to theorize about why malls can no longer compete with other retail formats and plan for the future of mall redevelopments.

Research and data for the following chapters is derived primarily from Professional Real Estate Development: The ULI Guide to the Business by Richard Peiser and David Hamilton and The Call of the Mall by Paco Underhill. A majority of my knowledge on the subject stems from conversations with Nick Egelanian, President of Siteworks, a retail consulting firm as well as participation in his class entitled Retail Real Estate Development and Asset Management at the University of Maryland Colvin Institute of Real Estate Development. Commodity and Specialty retail uses and shopping centers will guide my analysis of dying malls and serve as a reference for understanding retail problems and paradigms.

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02.01 – Retail Problems and Paradigms

02.01.A – Overbuilt Problem

While Americans have proven they have an insatiable appetite for shopping, it is clear that America is over-retailed. At 46.6 square feet, America has the most retail square footage per capita in the world.21 As stated in Professional Real Estate Development, “For many years, retail space was growing five to six times faster than retail sales. Most of this space came in the form of discount superstores on the suburban strip.”22 Over-saturation has forced retailers to consolidate or close. For the first time in a century, cities are growing at a faster rate than suburbs.23 As a result, the market areas that malls once relied upon are now shifted, forcing retailers to consolidate and reduce retail supply.

02.01.B – Single Use Problem

The hermetically sealed, uni-purpose mall fails to produce the sense of discovery it once did.24 The homogenous Main Street cannot reproduce the dynamic events and relationships that characterize a diverse urban

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environment. Rather than deploying cross-programming strategies, malls instead spend money on hosting superficial events such as book readings and face painting, which spark little public interest.

02.01.C – The E-Commerce Problem

The demographics that once supported the mall have shifted. More and more women, representing the most significant portion of all purchases in the United States, work outside the home. Americans simply have less time to shop. The mall, relying on long shopping trips, is no longer a sustainable retail format. Instead, online shopping has become a popular method of consumption due to its convenience. E-commerce does not close after hours and does not require shoppers to drive to bricks-and-mortar stores. In spite of this growing popularity of online shopping, less than 10 percent of retail sales take place online, and those sales tend to hit big-box stores the hardest rather than the fashion chains and other specialty retailers in enclosed malls.\(^\text{25}\)

Although e-commerce market forecasts project that online retail revenue in the United States will continue to escalate, shoppers still value the experience of shopping for products in brick-and-mortar stores. To succeed in the internet age, the physical retail channel must capitalize on multichannel or omni-channel experiences.

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02.01.D – Conclusion

An oversaturated, homogenous, and outdated retail system are problems that cannot be overcome by mere cosmetic redesigns. The mall format is unable to adapt to its two largest threats, shifting demographics and changing consumer trends.

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Table 1: Retail Problems and Paradigms

The following chapters are referenced from Professional Real Estate Development: The ULI Guide to the Business, by Richard Peiser and David Hamilton.

02.02 – Commodity Retail Paradigm

Commodity Retail goods and services are defined as those “goods and services purchased and consumed on a regular basis using primary household funds.”26 There are six different Commodity Retail formats that use different

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formulas for price and convenience. The six different formats—the convenience store, drug store, grocery store, discounters, category killers and warehouses—with the exception of e-commerce, range in trades areas and size. Successful Commodity retail shopping centers are designed to offer consumers efficiency, functionality, and cost effectiveness. Commodity shopping centers focus on easy access, adequate parking and visibility from the primary roadway system.27

During the “Golden Age” of the mall, full-lined department stores, acting as the suburban general store, formed the anchors of the retail delivery system. In 1948, Charles Lazarus opened Toys-R-Us, the first Category Killer, and changed American retail. Category Killers and Big-Box Retailers relocated from the mall to more efficient strip centers. By relocating from the mall, the Category Killers and Big-Box Retailers reduced prices and offered more convenient parking. As a result, categories ranging from toys to electronics disappeared from department stores, unable to compete with the convenience, lower prices and larger assortments provided by Category Killers and Big-Box Retailers.

Big-Box Retailers soon became the preferred retail model for consumers to purchase commodity goods. As a result, many American malls lost anchors and became functionally obsolete.

02.03 – Specialty Retail Paradigm

To retain and build customer interest, mall owners struggled to create a more exclusive and specialized shopping experience. Specialty Retail requires the expenditure of discretionary time and income. Specialty Retailers offer aspirational product assortments and places.28

Aspirational places evoke an emotional response from the shopper. Place-making demands careful design of buildings, open spaces, finishes, amenities and attractions. According to Nick Egelanian, President at SiteWorks Retail Consulting, “Successful Specialty Retail development generally requires a compelling mix of both product and place to succeed.”29 Although Specialty Retail formats, such as Lifestyle Centers, were conceived as places more conducive to social interaction and connection to the community, they have instead “left a legacy of confused and disappointed retailers and consumers and, most important, uneven sales results and defiant investment returns.”30 Although some important experiments have helped sustain malls, they are mere cosmetic redesigns rather than solutions that address the deeper issues of the mall.


03– Architectural/Space Based Problems of the Mall

Why is the mall no longer an aspirational place? Many of the theories surrounding this question stem from ideas by Paco Underhill, an environmental psychologist with an interest in retail. This thesis proposes that the architectural failures of the mall can be categorized into urban, exterior, and interior factors. The seven factors identified below compromise the mall’s sense of place and contribute to the decline of the specialized mall format.

03.01 – Urban Failures

At an urban scale, the mall is a scar that is disengaged from the urban fabric. The mall disrupts any existing block typology or building scale.

The land ownership is simple and dominant. Anchor tenants own their individual parcels while the developer owns any residual space. The mall format encourages auto-oriented development patterns by pouring huge swaths of asphalt parking lots. Malls are often located at the intersections of highways, complicating reintegration into the urban fabric.

03.02 – Exterior Failures

03.02.A – Façade or “Building Face”

The mall experience begins from the highway. Yet, mall façades are designed as big blanks walls with insignificant entrances.31 The largest retail

buildings ever constructed are not designed to attract shoppers nor give an indication of what happens inside.\textsuperscript{32} The spatial chaos of the parking lot discourages a main entrance or architectural hierarchy. The primary reason shoppers recognize the mall is because of its disproportionate scale and contrast to its surroundings.

\textbf{03.02.B – Access}

The suburbs segregate people by income and by distance. Malls, in the same fashion, influence who may enter by limiting public access. Underhill, proclaims malls to be elitist and xenophobic.\textsuperscript{33}

\textbf{03.02.C – Parking}

Malls treat parking lots as necessary evils. Little attention is paid to the shopper’s first experience driving to the mall. Finding a mall parking spot is prioritized by the easiest and fastest parking spot to reach and convenience to the shopper’s chosen entrance. In an urban environment, the journey to the retailer is an enjoyable part of the shopping experience that creates a sense of discovery. Generally, parking lots are not an enjoyable experience. It is no wonder that shoppers are frustrated before they even enter the mall and begin shopping.\textsuperscript{34}


03.03 – Interior Failures

03.03.A – Orientation

Once inside the mall, shoppers identify anchors or the central court. Shoppers tend to forget which entrance they have entered from because the landmarks do not help to orient them. Way-finding signs are too confusing to be helpful. “Shoppers negotiate spaces better if they have fixed points to guide them, like “Shoe over here” or Escalator there,” writes Underhill.\(^{35}\)

03.03.B – Public Domain

Malls have arguably taken the place of the town square as the public gathering space in suburban communities. Yet, the mall is a privately-owned property that has a history of limiting access to free-speech-related activities. Today, the mall has become a quasi-public and sanitized space where limited forms of expression are allowed.\(^{36}\)

03.03.C – Sense of Discovery

The retail arena is an effective place to people watch and socialize. However, malls have failed to sustain a sense of discovery. The Main Street is uni-purpose. The flat storefronts and unobstructed shopping street discourages shoppers from exploring. Enclosed malls are homogenized and boring, and fail to spark intrigue or even pause.\(^{37}\)

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03.04 – Conclusion

With the separation of Commodity Retail and Specialty Retail venues, Americans have changed the way they shop. Shoppers often make separate trips to the two groups of retail. Traditional malls are left in limbo because they cannot compete with the price and convenience of Commodity Retail nor the aspiration of Specialty Retail.

Though there have been some important explorations and experiments to help sustain malls, the mall format is no longer sustainable. With nearly 800 malls predicted to fail within 15 to 20 years, there is an opportunity to hypothesize about the future of shopping centers.

03.05 – Hybrid Retail Solution

I believe the future of retail is a hybrid of Specialty Retail, Commodity Retail and other uses. Hybrid retail is a more complete solution to consumers’ needs and encourages daily shopping trips. Hybrid retail is risky for both the developer and the tenant, who often cannot crossover from one group of retail to the other. In my opinion, the hybrid trend points to a longer and more resilient reality of integrated and balanced urbanism.

03.05.A – Hybrid Retail Precedent Analysis

I have analyzed two shopping centers with very different hybrid approaches that point to the future of retail.

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Assembly Row in Boston, Massachusetts has bifurcated a specialty main street and a commodity shopping center. The Main Street, named Assembly Row, is anchored by a riverfront park to the east and an Ikea to the west. Uniquely, outlet stores are the primary tenants along the Main Street. By separating the specialty main street and the commodity shopping centers, Assembly Row is progressive in the way it offers outlets in a mixed-use Main Street format alongside Commodity Retail. It is traditional, however, because it still preserves the formulaic approach to the Commodity and Specialty Retail formats.

Grandscape in Colony, Texas also has a quasi-Main Street lined with both Specialty Retailers and big-box stores. By combining Specialty Retail and Commodity Retail, Grandscape has compromised the formulaic approach of both types of retail. Grandscape, anchored by Nebraska Furniture Mart, has turned big-box stores into a destination by selling commodity goods so audaciously that it has become a specialty experience. Time will tell if shoppers accept the integration of Specialty Retail and Commodity Retail.

Figure 4: Assembly Row

Figure 5: Grandscape
03.05.B – Conclusion

Hybridization of Commodity Retail and Specialty Retail should encourage place-making that adopts mixed-use platforms to replace department store anchors. This thesis will investigate cross-programming Commodity Retail, Specialty Retail, and other uses to develop a new retail platform and encourage economic and social diversity.

03.06 – Performance Zoning Solution

To address the profound issues of the mall, this thesis will investigate place-making at three scales: the region, the site, and the building. I will impose Performance Zoning as an underlying methodology to create healthy, productive, and sustainable urbanism. Performance Zoning, or Sustainable Zoning, appeared in the United States over a decade ago to regulate energy consumption. Sustainable Zoning has been implemented to a small degree in places such as Washington, D.C. and New York City. New York City’s PlaNYC, released in 2007, encourages transit oriented development, calls for stricter permeable surface regulations, and requires bicycle parking in new buildings and garages.39

For the purpose of this thesis, I will limit all new development to the amount of energy I can produce on site in the form of photovoltaic panels and geothermal wells. The redevelopment of the mall will set a new standard of

balanced, sustainable and resilient urbanism and be a model for net-zero suburban development.

It is important to note that applying Performance Zoning standards to the mall is not enough to create an aspirational place. To bring the richness of the city to the ruin of retail I have studied six diverse urban and building strategies.
04 – Urban Theory

04.01 – Conceptual Framework

Studying diverse urban and building strategies led to a cursory toolkit of remedies for diverse urban contexts and situations. Analysis of six prevailing urban theories will provide a lens through which I will investigate urban strategies, financial modeling and adaptive reuse. Many of the research and conclusions are based upon Matthew Miller’s University of Maryland Thesis entitled Potomac Yard: Land & Event(scape). I have applied each of the urban theories graphically to two sites: Owings Mills Mall and Harundale Plaza in Maryland.

04.02 – Commodity Retail Urbanism

I chose to analyze Commodity Retail theory because the additional five urban theories below represent strategies for Specialty Retail. Because Specialty Retail and Commodity Retail are motivated by opposing factors, shopping centers with both types of retail should bifurcate Specialty Retail and Commodity Retail.

The physical forms of the six different Commodity Retail formats create efficiency and predictability. Retail architecture involves high transactional rates and the “efficient movement of customers on and off the property and in and out of retail stores on an ongoing basis. Shopping centers must accommodate a large volume of customers flowing through multiple points of access throughout the facility.”

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plans are designed for easy access, adequate parking and visibility from the primary roadway system. Pad sites with stores that rely on convenience, like drug stores and fast food restaurants, are located along the perimeter of the site, adjacent to the primary road system. Large surface parking lots are located in front of stores so that shoppers can conveniently park and enter the store. Big-boxes are located in the rear, at the least convenient location of the site because shoppers rarely make unplanned shopping trips to big-box stores and so convenience is less important.

![Figure 6: Commodity Retail Design Exercise](image)

**Critique**

Commodity Retail theory is responsible for the auto-oriented strip malls, big-boxes and power centers that are symptomatic of suburban sprawl. Large areas of surface parking limit pedestrian circulation and cause surface runoff problems. Commodity shopping centers do not have a sense of place and have ill-defined public spaces. Nevertheless, Commodity retail centers have proved effective at providing shoppers with everyday goods conveniently.

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04.02 – New Urbanism

New Urbanism is an urban movement being retroactively applied to the suburbs. New Urbanism has become the most influential urban design movement today.\textsuperscript{42} Neighborhoods are walkable and arrayed along a six zone transect based on density and are organized as well-ordered streetscapes and compact blocks that celebrate the local context.\textsuperscript{43} New Urbanist plans use the building figure ground to shape space.

New Urbanists mall redevelopments use the mall’s large parking lots to infill new buildings and a new block typology that reconnects thoroughfares. Parking lots are hidden within new blocks. The mall megastructure is repurposed as civic buildings and the façade is activated by attaching new uses and building types.\textsuperscript{44}

![Figure 7: New Urbanism Design Exercise](image)


Critique

New Urbanist communities create pockets of walkability but fail to address larger issue of sprawl, forcing users to drive to the communities. Architect Peter Eiseman argues that New Urbanism distorts urban reality because it is constructed at one time rather than evolving unpredictably over time. Users sense an inauthenticity or kitschiness. Similarly, many New Urbanist developments create faux town centers without true civic anchors.

New Urbanism does provide creative solutions to repurposing the mall and activating the building façade. The block typology can house multiple building types and creates an urban scaffolding that is able to adapt over time. New Urbanism is a good precedent for compact, walkable communities but must be integrated at multiple scales and must not be used as the default urbanism.

04.03 – Lean Urbanism

Lean Urbanism has been pioneered by Andres Duany in reaction to conventional codes with unnecessary controls that discourage development. Duany’s solution to excessive control is the Pink Code, which allows for more flexibility and reduces the time and cost of development. “Pink Zone Business Hub are places with relaxed regulatory framework, where experimental work is welcome, and where

new business can be learned, new business can be started and new business can flourish.”

Lean Urbanist strategies to redevelop malls are similar to New Urbanist strategies but are smaller in scale and are semi-permanent. Lean Urbanist schemes keep the existing mall structure intact as well as a substantial portions of the parking lots. Small portions of infill create walkable urban blocks arranged in a picturesquely. Liner buildings are small and inexpensive. The buildings are designed without sprinkler systems or elevators and avoid corners to keep construction costs low. Former department stores are transformed into community spaces while in-line stores become live-work studios.

**Figure 8: Lean Urbanism Design Exercise**

**Critique**

Lean Urbanism creatively adapts the existing mall while reconnecting the pedestrian network. However, because Lean Urbanism is based upon low-cost development, the buildings are only semi-permanent and ignore existing codes. The

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strategy relies on public sector reform and is limited in scope. The entire mall could not be redeveloped using Lean Urbanist principles.

Still, Lean Urbanism can be a catalyst for future development. I hope to use Lean Urbanism selectively to repurpose the mall and create an adaptable plan that anticipates future development.

04.04 – Infrastructural Urbanism

According to Stan Allen, Infrastructural Urbanism understands architecture as “an activity that works in and among the world of things and not exclusively with meaning and image. Infrastructural design begins with the precise delineation of specific systems within specific limits. Architectural form is based upon performance, inputs and outputs.”

Infrastructural Urbanism, like Landscape Urbanism, organizes urban fabric around a landscape of patches and corridors. Buildings turn their back to the street in favor of landscaped frontages. Some of the site is left unoccupied to allow the flexible and anticipatory development. With Infrastructural Urbanism the mall skin is ripped off, exposing the structural bones. Water filtration systems and public transportation corridors organize the urban fabric of buildings in the landscape.


Critique

Infrastructural Urbanism uses the landscape as a productive tool. However, ecological features such as streams and wetlands can bisect road networks and “clip the grid.” Andres Duany argues that, “without tremendous density, humans will not walk.”50 Similarly, open spaces and low density associated with Infrastructural Urbanism can be difficult to finance. At its worst, Infrastructural Urbanism represents a greener form of sprawl. Nevertheless, Infrastructural Urbanism offers a solution for a more environmentally conscious urbanism.51

04.05 – Event City

Event City, pioneered by Bernard Tschumi, seeks a dynamic relationship between architecture, urbanism and events. The urban fabric is an abstraction of


point, line, and plane. Extreme cross-programming creates shock value. A winding promenade juxtaposes rigid street grids which intersect in areas of extreme cross programming.

![Image of Event City Design Exercise]

**Figure 10: Event City Design Exercise**

**Critique**

Although extreme cross-programming could bring life back to the mall by providing 24/7 civic anchors, the various programs must be carefully choreographed. Event City is a solution that is able to support varied programs and cultivate a sense of discovery.

**04.06 – Collage City**

Colin Rowe argues that the city is a fragmentation of the past, present and future. Collage City is both rational and disordered, but strives to create mini-utopias that form a continuity between the historic city and the contemporary city.

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Critique

Collage City redevelopment of malls is difficult because malls are removed from the context of the exiting urban fabric. However, Collage City challenges traditional understanding of scale and creates an entirely new urban fabric from the collage of old and new spaces. Collage City is an interesting investigation into the principles of form-making and is a creative overlay to study an urban kit of parts that explore adjacencies and contextualism. While Event City erases history, Collage City instead uncovers history with the understanding that there is an irreplaceable authenticity of spaces that comes from the passing of time.

04.07 – Conclusion

Malls are cancerous pockets in the suburban fabric. They sit removed and are surrounded by a sea of parking lots. Often located at the intersection of major highways, they are difficult to retroactively integrate into the existing context. Their scale is out of proportion with anything else around them and their facades are massive, blank walls that are out of proportion with the pedestrian streetscape. Breaking malls apart and flipping them inside out is necessary in certain situations.
Because this solution destroys the interior street of the mall, it is important to be conscious of the fragile symbiosis between the interior and exterior of the mall.

My investigation of urban and building theories has yielded a cursory toolbox of strategies that I will apply to failing malls.

![Figure 12: Urban Theory Design Exercise Matrix](image_url)
05 – Adaptive Reuse Theory

In addition to strategies of urban planning, this thesis also considers strategies to adaptively reuse portions of the malls. Deconstructing the mall completely is not a sustainable solution. I studied strategies for buildings to outlive their uses. Buildings in cities are constantly adapting to new uses. Malls, on the other hand, are more challenging to salvage and repurpose because they are uni-purpose and are built with inexpensive materials and time-limited construction systems.

Figure 13: Adaptive Reuse Toolkit

05.01 – Introduction

There are many adaptive reuse strategies that range from contextualism, where interventions are not perceivable and the building is preserved as a snapshot in
time, to interventions that highlight the past by contrasting the old with modern interventions. This thesis investigation focuses on a strategy of conversion. The building is imagined as a kit of parts that can be taken apart and reassembled. This strategy takes apart the mall, putting it back together with different program and purposes in mind. Adaptively reusing parts of the mall helps uncover a historical narrative as well as adding social, environmental and economic benefits.

05.02 – Precedent Analysis

McAllen Main Library, by MSR Architects, is an adaptive reuse of an existing Walmart store in McAllen, Texas. The abandoned big-box store was repurposed into a flexible library that is roughly 2.5 football fields large with community meeting rooms, a children’s library and computer rooms. The city saved 33 percent in cost by acquiring and converting an empty big-box store rather than constructing a new building and was able to construct a substantially larger library and invest savings in landscaping and interior finishes.55

MSR Architects ripped out the old ceiling and walls, preserving only the existing structure. The new service areas were painted orange for wayfinding and to delineate the service spine.56 MSR Architects also designed a number of ceiling elements, including new skylights.


“Within the first month following the opening, new user registration increased by 23%.”

McAllen Main Library is the now largest single-story library in the United States and has become a central gathering space for the community. McAllen Main Library is one example of big-box stores being adaptively reused into senior centers, chapels, court houses and charter schools.

05.03 – Conclusion

Adaptive reuse of big-box stores takes advantage of the embodied energy of the structure, mechanical systems and parking lot so that redevelopments can focus resources in other areas of the building. McAllen Library is a precedent for a surgical design strategy that curates a life for big-box stores after retail. Adaptive reuse allows developers to reinvest the savings associated with reuse back into the project.

05.04 – Design Application

My research thus far has yielded a variety of (often opposing) conclusions about site paradigms and solutions. Therefore, in developing an overall parti, I will selectively use strategies from each of the urban and building theories to generate alternative design proposals. I will approach design with four different agendas: an ecological solution, an urban solution, a real estate solution, and an adaptive reuse solution as means of testing possibilities to their full extent. I imagine that the final design proposal for Marley Station Mall will stem from these investigations.

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Finally, I have set three separate design constraints:

1. Avoid interfering with anchor parcels.
2. Limit new density to energy produced on-site.
3. Preserve some history of the mall.

Operating within these three constraints offered a more feasible solution to redevelopment.
06 – Site Analysis

Data in the following chapters is derived from SitesUSA, an online mapping tool that analyzes demographic and market data as well as Google Maps.

06.01 – Introduction

This thesis is focused on failing malls located in areas that are highly distressed. Highly distressed areas are privileged for tax advantaged financing. As a case study for this thesis, I chose to research Marley Station Mall in Glen Burnie, Maryland. Today, the mall is roughly 14% vacant and the owners are struggling to determine the future of the property.

Located halfway between Baltimore and Annapolis, Marley Station Mall has unique constraints, including socio-economic disparities and competition from better performing malls. Marley Station Mall is a compelling case study to test the toolkit of urban and architectural strategies I have developed.

Data for the following chapters is derived primarily from Sites USA, an online commercial real estate mapping tool.

06.02 – Site Description

Marley Station Mall is located at 7900 Ritchie Highway in the town of Glen Burnie, in Anne Arundel County Maryland. The county is bounded by Baltimore City to the north, Prince George's County to the west and Calvert County to the south. The Chesapeake Bay and Patapsco River define the county’s eastern boundary.
Glen Burnie is considered a “first ring” suburb of Baltimore, but is located halfway between Downtown Baltimore (14.2 miles north) and Downtown Annapolis (16.2 miles south) along Governor Ritchie Highway (Route 2). Glen Burnie is well located in the regional marketplace because of its access to highways, proximity to BWI Airport (8 miles north), Fort Meade (12 miles west), I-95 (12 miles west), and position between Baltimore and Annapolis.

Figure 14: Location and Demographic Analysis
Figure 15: Marley Station Mall Aerial

Constructed in 1987, Marley Station Mall is nestled in the intersection of Route 100 and Route 2. The enclosed mall is an archetypal suburban mall. The 1,069,000 square foot shopping center has four anchor spaces and 120 interior tenant spaces. 50 acres of surface parking lots surround the mall and three access roads connect the Ring Road to Route 2.

The shopping center is divided into five parcels totaling 74.8 acres. For the purposes of the thesis, I have limited portions of my investigation to the 37.9 Developer Parcel that encompasses the parking lots adjacent to Route 2 and the body of the mall. Many mall redevelopments are stalled or completely blocked by anchors with reciprocal development rights. A famous example of this is Lord & Taylor’s
lawsuit against the White Flint Mall redevelopment. To avoid this, I have ignored the anchors for the first phase of development.

<table>
<thead>
<tr>
<th>Shopping Center Parcel</th>
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</thead>
<tbody>
<tr>
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<td>37.9</td>
</tr>
<tr>
<td>Macy Parcel</td>
<td>14.3</td>
</tr>
<tr>
<td>Penney Parcel</td>
<td>2.2</td>
</tr>
<tr>
<td>May Parcel</td>
<td>10.4</td>
</tr>
<tr>
<td>Sears Parcel</td>
<td>10.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>74.8 Acres</strong></td>
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<table>
<thead>
<tr>
<th>Site Area</th>
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</thead>
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<td>Shopping Center Parcel</td>
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</tr>
<tr>
<td>Flood Plain Area</td>
<td>20.2</td>
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<tr>
<td>Developer Adjacent Parcel 9</td>
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<tr>
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<td>Developer Adjacent Parcel 4</td>
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<tr>
<td>Developer Adjacent Parcel 6</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108.1 Acres</strong></td>
</tr>
</tbody>
</table>

**Table 2: Area Tabulation**

![Marley Station Survey](image-url)
06.03 – Access and Visibility

Glen Burnie is one of the oldest suburban communities in Anne Arundel County and is served by an extensive transportation network due to its location near Baltimore, Annapolis, and the Baltimore Washington International Airport. Governor Ritchie Highway (Route 2) is the principal arterial highway connecting Glen Burnie to Baltimore and Annapolis and is Glen Burnie’s primary commercial corridor (Zone C4 Commercial). Roughly 22,000 vehicles per day pass Marley Station using Route 2 and 75,000 vehicles per day pass Marley Station using Route 100 per day. Off-ramps to Interstate 97 and Interstate 95 are within 10 miles of the mall.59

Except for the Baltimore Light Rail Station, Glen Burnie is completely auto-dependent and has a 41 Walk Score.60 Over 92 percent of residents drive to work, while less than 7 percent of residents use public transportation or walk to work.61 Route 2 is surrounded by auto dealerships, fast-food chains, vacant retail stores, under-utilized commercial spaces and detached, single-family homes. Waterfront communities like Glen Burnie are a unique phenomenon. The service corridors are located inland while wealthier waterfront communities are hidden from site. The 55 mile per hour, 2 and 3 lane highway is considered an area in need of revitalization by the county and residents.

Public transportation to Marley Station Mall is limited. The Maryland Transit Authority Bus Route 14, which runs between Patapsco Light Rail Stop and


60 The site has a 41 Walk Score.

Annapolis/Jumpers Hole, has a stop on Route 2 that services Marley Station. The Baltimore and Annapolis Trail, a pedestrian trail that starts in Arnold and ends near the Cromwell Light Rail Station in Glen Burnie, hugs the western edge of the site. The Cromwell Light Rail Station, part of the Baltimore Light Rail System, is located in Glen Burnie and is only 2.7 miles north of Marley Station Mall.

Baltimore/Washington International Thurgood Marshall Airport, Southwest Airlines international hub, is located approximately 8 miles northwest of the site.

**06.04 – Environmental Analysis**

The topography allows shoppers to access the two-story shopping center at different levels from the surface parking lots. The northwestern corner of the site is the high point. Storm water runoff from the mall's parking lot flows directly into Marley Station Mall.

Marley Creek, a tributary of the Patapsco River, flows along the northern edge of the property. In 2002, Anne Arundel County adopted its first countywide Greenways Master Plan. The goal of the plan is to create an interconnected network of greenways in the County that protects ecologically valuable land. The Marley Creek Corridor greenway segment (a natural area at least 200 feet wide zoned Open Space) is a protected floodplain area.62

Marley Creek is in very poor condition and is deemed an environmental priority by the Office of Planning. Marley Creek has had a recreational advisory discouraging swimming, jet skiing, and water skiing since the late 1970's due to

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bacteriological and chemical contamination, including sediments (1996), nutrients (1996), bacteria (1998), polychlorinated biphenyls (PCBs, 1998), various metals (1998), impacts to biological communities (2002) and debris/floatables/trash (2008). There is an opportunity treat storm water runoff and reduce Marley Station Mall as a major point source of pollutants. An underground portion of Marley Creek flows under the northern parking lot. I saw this as a major opportunity moving forward.

![Figure 17: Floodplain and Topography](http://www.mde.state.md.us/programs/Water/TMDL/ApprovedFinalTMDLs/Pages/TMDL_final_Marley.aspx)

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Figure 18: Existing Zoning

06.05 – History

To understand future redevelopment opportunities it is important to understand the past success and failures of Marley Station Mall. Opened in 1987 by Taubman Centers in 1987, Marley Station Mall is young compared to most dying malls opened in 1970’s during the “Golden Age” of mall development.

In fact, Harundale Plaza, located one mile north of Marley Station Mall, was the first enclosed shopping mall on the East Coast and the first air-conditioned mall in the United States. The architecturally award-winning mall featured amenities such as a water fountain, a community room and large bird cages with talking Myna birds.65

Harundale was a major shopping destination for over 30 years until competition from Marley Station Mall and changing demographics in the trade area forced the shopping center to close in 1998. Today, Harundale Plaza is arranged as a power center and is almost fully leased.

Marley Station was constructed with Hecht's and Macy's as the original two anchors. Marley Station was later expanded in 1993 to add J.C. Penney and in 1996 to add Sears. In 2004, Simon Property Group bought the property.66 In 2006, Macy's relocated to the Hecht's building and sold its original location to Boscov's, which went bankrupt only two years later.67

According to Sara Blumberg of the Capital Gazette, in 2012, 44 percent of 120 stores were vacant.\(^6^8\) With sales of only $292 per square foot in 2012, Simon Property sold the former Boscov’s space to AiNET to operate the CyberNAP data center. Finally in 2013 Simon Property defaulted on its $114.4 million loan and Bank of America appointed the Woodmont Company as the receiver to manage and lease the mall.\(^6^9\)

According to Joe McBride, a research analyst for Trepp LLC, “there were two outstanding loans on Marley Station: an interest-only loan of $114.4 million that has been in foreclosure and another that was resolved for a 113 percent loss.”\(^7^0\)

Later in 2013, AiNET expressed interest in purchasing more of the mall to expand the data center. However, the Woodmont Company refused the $10,000,000 offer, stating that they were interested in reviving the mall. \(^7^1\) General Manager John Hess explained, “We’re taking a 30-year-old mall and shining it up and doing the best

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we can, and hopefully doing a very good job. The mall is here and is going to be here. We're happy to be a part of the community.”

06.06 – Competitive Landscape

Annapolis Mall and Arundel Mills, the largest mall in the state and one of the biggest tourist attractions in the region, located just 9 miles west of Marley Station, are direct Specialty center competition in the trade area. Before Arundel Mills opened in 2000 and Annapolis Mall expanded in 2007, Marley Station Mall attracted wealthy shoppers from Severna Park and Fort Meade. Competition from these two shopping centers is the main reason for Marley Station's decline.

Southdale Shopping Center, a Marshalls and Home Depot anchored power center, sits directly across Route 2 from Marley Station Mall.

06.07 – Tenant Operating Metrics

Today, roughly 14 percent of the mall, including most of north wing, remains vacant. I believe there is every indication that the mall will eventually fail.

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06.08 – Location Advantages

At first glance, Glen Burnie appears to be a strong retail location in the regional marketplace because of its access to highways, proximity to BWI Airport, Fort Meade, and position between Baltimore and Annapolis.
The trade area also has strong demographics with a stably growing population but is a less affluent area within an upper income region.

**06.09 – Location Limitations**

However, further analysis highlights why Marley Station Mall is dying and why some perceive the site undependable for future retail uses. The decline of the mall is due to changing demographics in the trade area, competition from more successful Class A malls and the deterioration of the commercial corridor along Route 2. Wealthy shoppers in the trade area do not recognize Marley Station Mall, or the Route 2 service corridor, as an aspirational Specialty retail location. Marley Station suffers from the perception that it is unsafe and that it has been neglected for years.

**06.10 – Zoning Analysis**

The 2004 Glen Burnie Small Area Plan envisions Glen Burnie as an urban transit hub for all of northern Anne Arundel County. Marley Station Mall is zoned C3 - General Commercial District. The C3 District is intended for larger arterial strip commercial development and shopping centers. One of the largest obstacles for redevelopment is rezoning.

However, Marley Station Mall was recently added to the Sustainable Communities Performance Zone. The Commercial Revitalization Districts as well as a Commercial Revitalization Tax Credit Program provides additional development incentives to property owners who revitalize commercial properties in the Sustainable
Communities Performance Zone. The mall redevelopment must prove increased supply of quality workforce housing, commercial corridor revitalization, storm water management retrofits, and increased the use of public transit in the area.\(^7\)

The trade area has changed so that Marley Station Mall is no longer economically viable in its current format and zoning. The redevelopment will transform the derelict shopping center, which may die altogether, into a community asset. The benefits include: upgrades to an aging retail facility, reduced retail supply, a provision of housing options, increased property tax revenue, increased walkability, and improved storm water management. The developer benefits include: long-term property interests, discounted purchase of 74.8 acres, and a commitment from the Department of Planning to assist the process or risk the mall becoming completely vacant.

\textbf{06.11 – Program Analysis}

For the purposes of this thesis, two of the four anchor parcels will remain intact so that design efforts are focused within the developer parcel (39.8 acres) and Macy’s parcel (14.3 acres). The other two anchors will be adaptively reused to take advantage of the embodied energy of the structure, mechanical systems and parking lot so that the redevelopment can focus resources in other areas of the building. Adaptive reuse allows developers to reinvest the savings associated with reuse back into the project. The program is intended to create both economic and social diversity

and include: (A) Commodity Retail, (B) Specialty Retail (C) Residential Units, (D) Recreational and Ecological Uses, and (E) Civic uses.

<table>
<thead>
<tr>
<th>Description</th>
<th>Units</th>
<th>SF</th>
<th>Rent/SF</th>
<th>EGI</th>
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<tr>
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<td></td>
<td></td>
<td></td>
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<td>1</td>
<td>120,000</td>
<td>16.50</td>
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<tr>
<td>Wegmens</td>
<td>1</td>
<td>120,000</td>
<td>17.00</td>
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<tr>
<td>Macy's</td>
<td>1</td>
<td>109,054</td>
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<td>JC Penney</td>
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<td>Boutique</td>
<td>18</td>
<td>100,710</td>
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<td>26.60</td>
<td>$711,710</td>
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<td>Movie Theater</td>
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<tbody>
<tr>
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<td></td>
<td></td>
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</tr>
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<td>800</td>
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<td>950</td>
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<td>Affordable 2 Bedroom</td>
<td>40</td>
<td>950</td>
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<td>1 Acre</td>
<td>0.36</td>
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</tr>
<tr>
<td>Wetlands</td>
<td>20 Acres</td>
<td>1.44</td>
<td>$4,000,000</td>
<td></td>
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<tr>
<td>Parking Garage</td>
<td>360 Spots</td>
<td>22,500</td>
<td>$8,100,000</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3: Program**

**A – Commodity Retail**

Although Route 2 no longer supports much Specialty Retail, it has become the primary commodity retail corridor from the Baltimore Beltway all the way to Route 50. Within that area, there are no national upscale grocery anchors, such as Shoprite or Wegmans. The closest Wegmans is in Crofton, which is a 24 minute drive from Severna Park, compared to a 14 minute drive from Severna Park to Marley Station Mall. **Wegmans (120,000 SF)** has a large commodity retail trade area that would draw from Arnold and Annapolis to the South and to Gibson Island to the East.
Additionally, by relocating the Costco (200,000 SF) on Ordinance Road to the property, Marley Station Mall would have a powerful commodity retail combination.

However, Target (**120,000 SF**), would also be a powerful commodity retail anchor that draws well locally and is better suited to the size of the site. The Two Commodity Anchors will be located on separate floors of the existing Sears building (**110,000 SF**). The first floor of the building is accessed from the West parking lot while the second floor is accessed by the South parking lot. Target will be located on the first floor in order to access the new outdoor Specialty Retail plaza.

Finally, two Pad Sites will be arranged along Route 2 at the Southern and Northern tips of the property. The Pad Sites will be tenanted by higher-end restaurants such as Bonefish Grill, Panera Bread, Starbucks, or Green Turtle.

**B – Specialty Retail**

The design severely reduces the amount of Specialty Retail. However, the small Specialty Main Street and urban plaza, anchored by the existing movie theater, does provide a Specialty Retail draw. Some of the national chains in the mall will be relocated to the new Main Street as well as introducing local restaurants and a local brewery.

**C – Residential Units**

The residential units are arranged around a new day lit portion of Marley Creek. Frontages are maximized on the creek as an added amenity. The project introduces approximately **505 apartment units** in two mixed-use buildings and two multifamily buildings along the Main Street, as well as approximately **87 townhomes** along the creek. The product diversity is currently not in the market even though there
is significant demand. 20% of the units are intended for Low Income Housing at 50% of Area Median Income.

**D – Recreational and Ecological Uses**

Patrick Hughes also expressed the potential for recreation facilities connected to the Baltimore and Annapolis Trail, including *indoor facilities and a community park* in the Glen Burnie area. A portion of Marley Creek will be day lit and incorporated into the B&A Trail in order to manage runoff, provide bioremediation, and create an amenity and brand the development.

**E – Civic Uses**

I have also introduced a culinary institute and school as civic anchors for the site.

**06.12 – Conclusion**

Marley could also potentially benefit from AiNET’s willingness to purchase more of the mall to operate the CyberNAP data center.

Marley Station Mall is one of the best opportunities for infill in Glen Burnie because the parcel has singularly owned and because Glen Burnie is primarily built out. The programs listed is specific to the Marley Station Mall Trade Area and is centered around food because the area is a USDA Food Desert. However, the design should create a framework for the uses and the tenants to change over time. By creating well-proportioned blocks and well-defined streetscapes, the uses can adapt over time.
07 – Design Analysis

Where the mall was homogenous, disorienting, and placeless, the design intends to create specific places and landmarks to orient visitors. The design in-fills a portion of the surface parking lot to create a new retail Main Street that runs perpendicular to Route 2. The Main Street terminates in an outdoor plaza carved from the existing structure of the mall. Finally, the portion of Marley Creek running beneath the surface parking lot is unearthed. The unearthed portion of Marley Creek is an amenity for the new residents, reduces the impervious surfaces, and adds an extension to the B&A Trail.

The design analysis is divided into four sections: real estate development, urban design, adaptive reuse, and environmental sustainability.
Figure 22: Existing and Proposed Site Plan
07.01 – Real Estate Lens

The real estate industry has three common strategies in response to dead malls. The first strategy is to abandon the mall, ignoring the problem altogether. The second strategy is to target a new demographic. This solution creates a second life for the mall but devalues the property. The third strategy is to raze the mall and redevelop the mall in an entirely new image. This solution erases all remnants of the past and fails to capitalize on the embodied energy of the existing mall.

Some important explorations and experiments have helped sustain malls, yet they are cosmetic treatments of a malady that needs deeper diagnostic insight and more structurally significant solutions. I have adopted the position of adaptively reusing a portion of the mall in order to harness the embodied energy of the mall and save on the capital expenses associated with new construction.

The real estate strategy also limited a majority of all new construction to the 39.4 acre developer parcel. By doing so I hope to avoid interference with the anchor parcels.

Finally, by introducing a hybrid of uses and reducing the retail supply, the redevelopment creates more economic and social diversity. By reducing the retail supply by almost half and adding two commodity retail anchors the design is a more complete solution to consume needs and encourages everyday shopping trips.

A new culinary institute and school are civic anchors. By introducing over 592 mixed income residential units the project can use New Market Tax Credits and Low Income Housing Tax Credits to finance a portion of the development costs. The density achieved was not anticipated, however, the real estate model required more
income generating uses. The financial modeling for this project turned out to be just as difficult as the design portion. The feedback system of the two variables were constantly influencing one another. Two tables from the real estate proforma can be seen below.

<table>
<thead>
<tr>
<th>Source</th>
<th>Percent</th>
<th>Source Amount</th>
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</thead>
<tbody>
<tr>
<td>Permanenet Loan</td>
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</tr>
<tr>
<td>Developer Equity</td>
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<tr>
<td>Deferred Developer Fee</td>
<td>3%</td>
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<td>Deferred Design Fee</td>
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<td>Forgiven Equity Total</td>
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<td>Total Development Cost</td>
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Table 4: Key Financial Returns

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</thead>
<tbody>
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<tr>
<td>10 Year Average Debt Coverage Ratio</td>
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<td>Leveraged IRR</td>
<td></td>
<td>17.36%</td>
</tr>
<tr>
<td>Leverage NPV</td>
<td></td>
<td>$33,122,978</td>
</tr>
<tr>
<td>Cash on Cash</td>
<td></td>
<td>11.22%</td>
</tr>
<tr>
<td>Sale Value in Year 10 (7.0% Cap Rate)</td>
<td></td>
<td>$237,648,283</td>
</tr>
<tr>
<td>Value Creation at Sale</td>
<td></td>
<td>$3,664,064</td>
</tr>
</tbody>
</table>

Table 4: Financial Sources
Finally, the density of all new construction is limited to the energy produced on-site. Nearly one-third of the property was devoted to energy production in the form of photovoltaic panels on carports above the existing surface parking lots and geothermal wells. This determined the number of housing units the property could support but was the most difficult metric to satisfy. As energy producing technologies advance, I believe this portion of the design will become more feasible.
07.02 – Urban Design Lens

The urban design strategy aims at reintegrating the mall into the existing suburban fabric. The road network is currently disengaged from the surrounding context. The new road network reconnects existing thoroughfares. The new Main Street creates street hierarchy, funneling traffic to the new plaza while providing multiple points of access along Route 2. The existing bus route and trail network are integrated into the new road network to encourage multimodal transportation.
A more regularized block typology allows building density and typology to evolve over time. Parking is hidden within the blocks allowing a 4:1 parking ratio necessary for suburban retail development.
07.03 – Environmental Sustainability Lens

Unearthing a portion of Marley Creek beneath the surface parking lot was critical to the urban design and environmental sustainability strategy. Mall parking lots are a major point source for pollutants such as PCB’s and hydrocarbons. By daylighting Marley Creek the design creates a linear park that is a new ecological corridor and catchment area for storm water runoff.

The linear park is a passive system that treats the runoff of PCB’s, hydrocarbons, and other pollutants in order to reduce Marley Station Mall as a point source for pollutants. The passive system is modeled off of the Dell, at the University of Virginia and the Shanghai Houtan Park by Turenscape. The first stages of the system treat PCB’s and hydrocarbons using phytoremediating plants and hyperaccumulators such as hemp dogbane, poplar trees, and sunflowers. Water moves through subsurface filtration to pathogen and heavy metal removal. Next, the water is oxygenated using weirs for aeration. The system narrows at the crossing to create a more urban Creek Walk similar to Hammarby Sjostad, in Stockholm. Finally, the water reaches a forebay before it is filtered through sand and settles in a clean water impound before it is eventually released back into Marley Creek. The creek is a didactic system where students from the school, residents and visitors can learn more about the Chesapeake Bay watershed during each step of the treatment process.
Figure 27: Ecological Patches and Corridors

Figure 28: Creek Walk Perspective
07.03 – Adaptive Reuse Theory

The final piece of the design was the adaptive reuse of the mall itself. Malls are inward looking. Shoppers enter through insignificant entrances on giant blank facades to an internalized street network that is intentionally disorienting and confusing, distorting the perception of time and place. Small courtyards offer moments of reprieve. The mall is place defined by people watching, so that we can comfortably observe society. Yet, because the mall is so carefully choreographed, it limits expression and lacks the character of a truly meaningful public space.
In order to reverse this trend, I have externalized the mall; turning the mall inside out. The design carves out a portion of the existing structure in order to create a new plaza. The facades are no longer blank, but activated by a variety of uses. For this thesis, I have intentionally exaggerated the facades to reflect the uses of the spaces. The style of the façade is not as important as the registration by the user. The space is meant to be the new heart of civic activity and is flexible to serve current and
future community needs such as informal gatherings and park space. A portion of the plaza is dedicated for food trucks and a farmers market. The uses include space for outdoor cafes, a brewery, a new indoor food court, a culinary institute and community center, as well as residences to keep eyes on the plaza at all times. The uses ensure that the space should be activated throughout the day and the intense cross programming, similar in concept to Bernard Tshumi’s Event City, is cross section emulating a true downtown.

Instead of hiding the old mall, I have exposed parts of its past, celebrating the passing of time. Some of the existing columns are left exposed as space defining elements in the plaza. Their concrete casing is allowed to decay, exposing the internal steel structure which simultaneously rusts. The old trusses are meant to be an interactive elements that could be used as seating elements. As a symbolic gesture, I have incorporated portions of the Baltimore and Annapolis Railroad lines that could theoretically lie buried beneath the mall into the pavement pattern. The old footprint of the mall is also demarcated in the pavement pattern. Finally, grass can grow selectively in-between the cracks of the old floor tiles. The eventual cracking of the tile exposes what was and what could be.

The old courtyard, the original hearth of the building, is preserved with a new tower harkening back to the old elevator. The iconic tower is a landmark that helps orient visitors. In contradiction to current mall redevelopments, the space is designed to be tied specially to Marley Station to encourage a sense of discovery and exploration.
Figure 30: Plaza Perspective
08 – Conclusion

With half of America’s shopping malls predicted to fail in the next 15 to 20 years, there is an opportunity to hypothesize about the future of these failing malls. Single-use and removed from the urban fabric, malls are unable to adapt to shifting demographics and consumer trends.

Homogenized, disorienting, and placeless, malls have lost all sense of time and place. The goal of this thesis was to reconnect the mall with the urban fabric in order to create a walkable, productive, self-sustaining and adaptable place. The goal of the design was to accommodate today’s needs while providing a flexible infrastructure that can adapt to future needs. The spaces and blocks are proportioned for building use, typology, and density to change over time. In this way, architects do not have to grapple with the same problems again in the next 30 years.

Finally, I hoped to highlight the passing of time by preserving and repositioning portions of the mall. I believe this will evoke a sense of place and discovery not present in current mall redevelopments. The mall format is in the midst of a national decline because it is highly specialized and unable to adapt to changing consumer trends, shifting demographics and market demands. The Marley Station redevelopment intends to create a more balanced, sustainable and resilient place-making.

As large, singularly owned parcels, malls offer some of the best opportunities for suburban infill. Mall infills may have some pushback from people that believe development efforts should be concentrated in suburban downtowns. However, mall
redevelopments are not meant to replace small city downtowns. Rather, mall redevelopments add another node of development and more housing options to communities in need.

Mall redevelopments can take on different forms and functions but should improve the health and welfare of present and future residents. By analyzing each site through the lens of real estate development, urban design, environmental sustainability, and adaptive reuse, designers can propose more holistic strategies to remedy the complexities of the American mall.

Figure 31: Main Street Perspective
Bibliography


Egelanian, Nick, President of Siteworks


